

ABSTRACT

Sub
AI

A processor and computer system are described which execute gather and scatter operations with general purpose instructions. Gather operations comprise identifying non-zero data elements of a matrix stored in memory and depositing the data elements contiguously within a register (e.g., in a packed data format). Scatter instructions comprise extracting the data elements packed contiguously within a register or memory and copying the elements to identified non-contiguous locations in a matrix stored in memory.

0062E0"2T08E560